

Appl. No. 10/708,276  
Amdt. dated March 07, 2007  
Reply to Office action of February 21, 2007

### REMARKS/ARGUMENTS

#### **Claim rejections – U.S.C. 102(b)**

Claims 1 – 15 were rejected under U.S.C. 102 (b) as being anticipated by Brauch et al.

#### 5 Response

##### Claim 1

Claim 1 has been amended to include the limitations that the plurality of operating environments respectively correspond to variations in a condition be tested, and that if the results of the memory under each of the plurality of operating environments are the same then the memory can be determined to have integrity. Furthermore, the word “repeatedly” has been added to the testing stage to emphasize that the same memory is tested under the plurality of environments. It can therefore be clearly seen from Claim 1 that the same memory is repeatedly tested under many operating conditions, and results of these tests are compared with each other, wherein if the results are the same then memory is determined to have integrity. As Brauch only discloses comparing a test result with an expected (i.e. predetermined) result to determine number and location of defects in the memory under test, there is no motivation given by Brauch in the specification for testing **the same memory** under many operating environments, and then comparing test results **with each other** to determine if the memory has integrity.

##### Claims 2 and 3

Claims 2 and 3 have been amended to emphasize that the BIST is carried out under each of the plurality of operating environments, and that the step of “recording

Appl. No. 10/708,276  
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the content of the status record memory” is also performed under each of the plurality of operating environments. As claims 2 and 3 are dependent on Claim 1 they should be found allowable.

#### Claims 4 and 5

- 5       As Claim 1 has been amended to clearly define that the same memory is tested repeatedly under different operating environments, wherein the plurality of operating environments respectively correspond to variations in a condition to be tested, applicants believe that claims 4 and 5 are patentable over the prior art.

#### Claims 6 and 7

- 10       Claim 6 has been amended to clearly define that the testing step comprises “counting the number of defects stored in the memory”. As this limitation is not taught by Brauch, applicants believe Claim 6 should be found allowable. Furthermore, Claim 7 has been amended to explicitly state that the number of detected defects are stored. As this limitation is also not taught by Brauch, applicants assert that Claim 7 should  
15       similarly be found allowable.

#### Claims 8 – 10

- Claims 8 – 10 have been amended to more clearly define the steps of comparing the memory test results to determine memory integrity, and the step of storing the position of each detected defect. As claims 8 – 10 are dependent on Claim 1,  
20       applicants believe they should be found allowable.

#### Claim 11

      Claim 11 has been amended to show that the first operating environment and the second operating environment correspond to variations in a condition to be tested, and

Appl. No. 10/708,276  
Amdt. dated March 07, 2007  
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therefore the memory is repeatedly tested under different operating conditions as in Claim 1. Claim 11 has been further amended to state that the result of the memory test under the first operating environment is compared with the result of the memory test under the second operating environment, wherein if the results are the same then the  
5 memory can be determined to have integrity. These limitations are not taught by Brauch, who only teaches performing the memory test once, and then comparing the result with an expected result. Applicants therefore assert that Claim 11 is allowable over Brauch.

#### Claim 12

10 Claim 12 has been amended to correct for a grammatical error. As Claim 12 is dependent on Claim 11, it should be found allowable.

#### Claim 13

Claim 13 is dependent on Claim 11 and should therefore be found allowable.

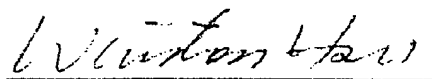
#### Claims 14 – 15

15 Claims 14 – 15 have been amended to more clearly define that the first and second operating environments correspond, respectively, to a variation in supply voltage and temperature. As Brauch does not teach repeatedly testing a same memory under a plurality of operating environments respectively corresponding to variations in a condition to be tested, applicants assert that claims 14 – 15 should be found  
20 allowable over the prior art.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Appl. No. 10/708,276  
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Sincerely yours,



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- 10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)